WE CLAIM:

1. A breathable sole structure for footwear comprising:

an insole having an area with a plurality of holes transversing said insole;

an outsole having an area with a plurality of holes transversing said outsole;

a functional membrane system, comprising a microporous hydrophilic membrane and a microporous hydrophobic membrane;

said insole and said outsole being bonded together; and

said functional membrane system being sandwiched between said insole and outsole, said functional membrane system further being located between said areas.

2. The breathable sole structure for footwear according to Claim 1, wherein said functional membrane system being a single laminated bi-layer functional membrane system.

3. The breathable sole structure for footwear according to Claim 1, wherein said insole and said outsole being bonded to each other by a method selected from the group consisting of press-gluing method, and injection molding method.

4. The breathable sole structure for footwear according to Claim 1, wherein said outsole further comprising a tread.

5. The breathable sole structure for footwear according to Claim 1, wherein said microporous hydrophilic membrane has a thickness in the range of 250μ to 1200μ; an average pore size in the range of 0.1μ to 1μ; a Gurley of 45 seconds/10cc; and a porosity in the range of 60% to 70%.

6. The breathable sole structure for footwear according to Claim 5, wherein said microporous hydrophilic membrane further having an absorption according to the thickness in the range of 20mg/cm^2 to 60mg/cm^2; a desorption of 100%/2h; and a permeability to steam according to thickness in the range of 60mg/cm^2/8h to 130mg/cm^2/8h

7. The breathable sole structure for footwear according to Claim 1, wherein said microporous hydrophobic membrane having a porosity in the range of 30% to 60%; an average pore size in the range of 0.02μ x 0.08μ to 0.2μ x 1.5μ; a thickness in the range of 8μ to 50μ; and a Gurley in the range of 5 to 100 seconds/10cc.

8. The breathable sole structure for footwear according to Claim 7, wherein said microporous hydrophobic membrane further having a tensile strength (machine direction) in the range of 15kpsi to 19kpsi; and a tensile strength (transverse direction) in the range of 1.2kpsi to 2.2kpsi.

9. The breathable sole structure for footwear according to Claim 1, wherein said microporous hydrophobic membrane having a porosity of 55%; an average pore size of 0.209μ x 0.054μ; a thickness of 25μ or less; and a Gurley of at least 9 seconds/10cc.

10. The breathable sole structure for footwear according to Claim 1, wherein said microporous hydrophilic membrane comprising a polyolefin.

11. The breathable sole structure for footwear according to Claim 10, wherein said polyolefin being selected from the group consisting of a polyethylene, a polypropylene, and combination thereof.

12. The breathable sole structure for footwear according to Claim 1, wherein said microporous hydrophobic membrane comprising a polyolefin.

13. The breathable sole structure for footwear according to Claim 12, wherein said polyolefin being selected from the group consisting of a polyethylene, a polypropylene, and combinations thereof.